MODIS Technical Team Meeting Thursday, February 28, 2002 Building 33, Room F225 3:00 P.M.

Vince Salomonson chaired the meeting. Present were Barbara Conboy, Shaida Johnston, Bill Barnes, Gary Alcott, Skip Reber, Eric Vermote, Wayne Esaias, and Steve Kempler, with Rebecca Lindsey taking the minutes.

1.0 Upcoming Meeting

- ➤ AGU, Spring, May 28-Jun 1, Washington, D.C.
- ➤ AMS, Atmospheric Radiation and Atmospheric Physics, first week of June, Odgen, Utah.
- MODIS Land Cover Meeting, June 3-4, University of Maryland, College Park.
- ➤ IGARSS 2002, June 24-28, 2002 in Toronto (abstract deadline past)
- ➤ MODIS Community Outreach Workshop on MODIS Vegetation Variables (VI/LAI/FPAR/NPP), July 15-19th 2002, University of Montana, Missoula, MT
- ➤ MODIS Science Team Meeting, Tentative, July 22-24, 2002
- ➤ Remote Sensing of the Earth's Environment from Terra, a workshop at the International Summer School on Atmospheric and Oceanic Sciences, August 25-30, 2002, L'Aquila Italy
- ➤ 34TH COSPAR Scientific Assembly, October 10-19, 2002, in Houston, TX, (abstracts due 1 May)

2.0 Meeting Minutes

Instrument Update

Barnes reported that TRW shipped the Aqua spacecraft to WTR. Salomonson said there had been discussion about setting the minimum mission success criteria. This involved estimating probabilities for instruments operating over a given period. The acceptable threshold probability for all instruments, etc., combined should exceed 0.75. Salomonson agreed to two years of operation for MODIS as a minimum success criterion. That seemed to combine appropriately with the other probabilities and still be rational.

Barnes said that MCST will meet with SDST for scheduling the L1B reprocessing. He added that since MCST has a deadline of end of April to deliver all new code to SDST, they must know of any changes people want to see included in the code delivery as soon as possible. They have included the Band 26 correction from Chris Moeller, and they will also include the new Thullier solar spectrum, as well as time dependent RVS and degradation. MCST has drafted an overview of L1B software for Jim Simpson, who requested it, and Barnes will send it to Salomonson to review. It is fairly high-level. MCST may put in on the web as well.

With respect to L1B reprocessing, Salomonson said it appears the effort will take approximately 15 months.

Data Processing Update

Salomonson summarized the current thinking about reprocessing. We will be doing Oceans this summer, and then Atmosphere and Land with L1B in October.

Alcott reported that statistics from the last two months indicate a surprising amount of Collection 1 data is being ordered—about 340 GB, mostly atmosphere L2 products. He said he has a list of users, and he plans to contact them and ask if they are OK with using the collection 4 when it becomes available. All data in this next reprocessing will be Collection 4, including the Oceans reprocessing.

Kempler reported that DAAC processing is at the leading edge. Kempler said that it appears distribution dips, but Alcott said that is because they are doing SAFARI, which is not part of subscriptions. Kempler said that he had spoken with Mark Carrol, who had registered a complaint about being unable to get the data he wanted. The problem was resolved, but is raises the issue of having to push the data manually. The DAAC metrics don't show how much effort it is takes to hand-massage these orders, and they don't show how many people don't ask for special help in filling their request.

Kempler said that he had given a presentation on secondary distribution sites at the Science Data Workshop. Another presentation was given on universal data access for people with special needs, like GIS. Kempler said they would be keeping metrics on how much MODIS data is being distributed from secondary sites.

Tom Kalvelage, EDC DAAC Manager, is discussing with Kempler their experience with 6A05 installation. EDC is having difficulties implementing 6A05, especially with the data access. Kempler said April 8 is the last day the DAAC would be willing to accept 6A05 into operations before Aqua launch. Johnston said the team should look at our own schedule to find an appropriate time that we could offer as an alternative. Esaias asked about the possibility of rolling back to a previous version if we encounter problems, but Johnston said that when they asked that question at the ORR, the answer was basically no, not beyond a certain point.

Reber wondered if there was anything in 6A05 that messes up ingest and processing. Kempler said no, and that that was one of the criteria for installation—that safety of data capture is not affected. But the version we have now does that, so the second criterion for putting it in is that it solves current problems, most of which are with distribution.

Reber also said mentioned metrics, and the two classes of users who have problems: those who bring their complaint to user services, and a whole other class of people who never even come to the DAAC with complaints, who visit the EDG, but never even actually make an order. We need to track those people as well. Kempler agreed saying that there are two "negative" metrics that need to be kept; how many people leave the EDG without ordering, and how much time the DAAC spends hand tailoring orders for people.

Alcott said he is working with Mike Moore to develop a reconciliation log that the DAAC can use to match up orders placed through the EDG to orders received at the DAAC.

Reber reported that Glen Iona has been named systems manager of ESDIS. It appears that the ESDIS Project itself will undergo some reorganization, and there will likely be a development project and a DAAC operations project.

As indicated in a note to last week's minutes, Reber reported that the metadata update tool discussed last week is not the ESDIS one, but a DAAC-unique extension. The ESDIS one is probably going to be delivered next week, but he doesn't know if it will handle the multiparameter Ocean ESDTs. However, he got assurances from Moore that the discipline representatives had been consulted in the development. Esaias said that he thought that Kay Kilpatrick was the representative, and that it was she who told him that the tool couldn't handle multi-parameter ESDTs.

Reber said that he often gets what he deems to be science questions about the data, and wondered how he should handle them. Vermote said that it is best to send it to the DAAC user services at first, because even if they don't know the answer, they will know to contact the scientists. Over the long term, then, the user services staff would hopefully be able to answer more of those questions themselves.

Land Update

Vermote reported that Steve Running has developed the final agenda for his land outreach meeting. He also reported that there will be a number of land results at the spring AGU and the special issue of Remote Sensing of Environment is to be sent March 15, and will be published in fall.

Vermote said they are making good progress with the Interdisciplinary Global Sampler data set. They have already processed a first version of the surface reflectance product over 12 months and snow cover has been implemented and is being tested. He should receive a sample of the albedo product from Boston next week. So far, he thinks that they are on schedule for the product being ready at the end of March.

Salomonson said that MAST has an ftp site for the distribution. On the CD, there will be 1 ° data and a high-resolution jpeg for atmosphere and ocean products, and for land there will be .25 ° data and high-resolution jpeg. Salomonson thought there should be jpegs for each month (or 32 day product). Then on the ftp site, atmosphere wants the minimum, maximum, and standard deviations, oceans wants QA info, and land wants .05 resolution. Vermote added that they would also include tools to read the data, and Louis Gonzalez is going to work on a specific tool for this project.

Conclusion

Salomonson said, based on what he has heard, that the team will likely need to keep August open for writing responses to the "re-competition" rfp.

3.0 Action Items

3.1 Discipline leads to meet to resolve the issue of beta-release code and science-quality code, and what we need to say about it.

Status: Open.

3.2 Technical team to discuss further the issue of predicted ephemeris data and how to

improve it. Status: Open.